

# MASTER VIEW KVM SWITCH

2 Port KVM Switch



## USER MANUAL

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# CS-82A

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Read this guide thoroughly and follow the installation and operation procedures carefully in order to prevent any damage to the units and/or any devices that connect to them.

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This package contains:

- 1 Master View CS-82A KVM Switch
- 1 User Manual

If anything is damaged or missing, contact your dealer.

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**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ◆ Reorient or relocate the receiving antenna;
- ◆ Increase the separation between the equipment and receiver;
- ◆ Connect the equipment into an outlet on a circuit different from that which the receiver is connected;
- ◆ Consult the dealer or an experienced radio/television technician for help.



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## OVERVIEW

The Master View CS-82A KVM (Keyboard, Video, Mouse), Switch is a control unit that allows access to two computers from a single console (keyboard, monitor and mouse). Before the development of the Master View, the only way to control multiple computer configurations from a single console was through a complex and costly network system. Now, with the CS-82A, you can easily access two computers in a cost effective manner.

Setup is fast and easy; plugging cables into their appropriate ports is all that is entailed. There is no software to configure; no installation routines; and no incompatibility problems. Since the CS-82A intercepts keyboard input directly, it works on all hardware platforms and operating systems\*.

The Master View CS-82A provides two convenient methods to access the computers connected to the system: 1) push button Port Selection Switches located on the unit's front panel; and 2) Hotkey combinations entered from the keyboard.

There is no better way to save time and money than with a Master View CS-82A installation. Since a single console manages both of the computers, a CS-82A setup: 1) eliminates the expense of having to purchase a separate keyboard, monitor, and mouse for each computer; 2) saves the space those extra components would take up; 3) saves on energy costs; and 4) eliminates the inconvenience and wasted effort involved in constantly moving around from one computer to another.

\* Mac and Sun systems may require additional equipment. See p. 5 for details.

## **FEATURES**

- One console controls two computers
- Easy to install - no software required - connecting cables is all it takes
- Easy to operate - computer selection via push button switches or hotkeys
- Auto Scan function to monitor computer operation
- LED display for easy status monitoring
- Caps Lock, Num Lock, and Scroll Lock, states are saved and restored when switching
- Keyboard and mouse emulation for error free booting
- Supports Microsoft Intellimouse and the scrolling wheel on most mice
- Superior video quality - up to 1920x1440; DDC; DDC2; DDC2B
- Compatible with all operating platforms\*
- Compact, sturdy, durable metal housing
- Efficient, ergonomic design - logical connector layout
- Follows PC 99 color specifications
- Non-powered operation
- Saves time, space, power, and equipment costs

\* Mac and Sun systems may require additional equipment. See p. 5 for details.

## **HARDWARE REQUIREMENTS**

### **CONSOLE**

- ◆ A VGA, SVGA, or Multisync monitor capable of the highest resolution that you will be using on any computer in the installation
- ◆ A PS/2 style keyboard
- ◆ A PS/2 style mouse

### **COMPUTERS**

The following equipment must be installed on each computer that is to be connected to the system:

- ◆ A VGA, SVGA or Multisync port.
- ◆ A PS/2 Style keyboard port.
- ◆ A PS/2 Style mouse port.

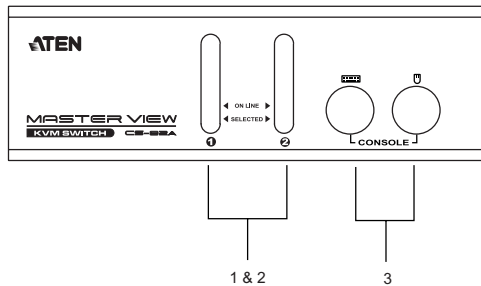
### **CABLES**

Only CS Custom cable sets specifically designed to work with this switch may be used. KVM cable sets are available in 1.2, 1.8, 3, and 6 meter lengths (see table, below):

<b>Length</b>	<b>CS Part Number</b>
1.2 m	2L-5201P
1.8 m	2L-5202P
3.0 m	2L-5203P
6.0 m	2L-5206P

If you need to purchase cables, contact your dealer.

## FRONT VIEW



### 1. Port Selection Switches

Press a switch to access the computer attached to the corresponding port.

### 2. Port LEDs:

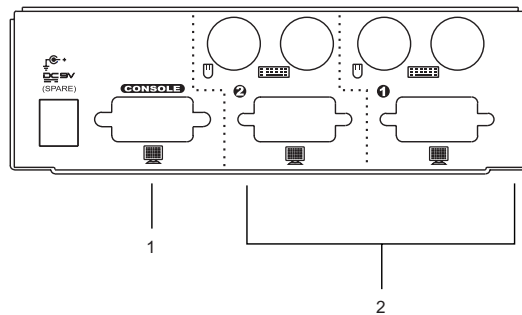
The Port LEDs are built into the Port Selection Switches. The upper ones are the On Line LEDs; the lower ones are the Selected Port LEDs:

- ♦ The *On Line* LEDs lights ORANGE to indicate that the computer attached to the corresponding port is up and running.
- ♦ The *Selected* LED lights GREEN to indicate that the computer attached to its corresponding port is the one that has the KVM focus. Depending on the port's status, the LED may flash according to a specific pattern (see the *LED Display* table in the Appendix for details).

### 3. Console Keyboard and Mouse Ports

The cables from your keyboard and mouse plug in here. Each port is color coded and identified by an appropriate icon.

## REAR VIEW



### 1. Console Video Connector

The cable from your monitor plugs in here.

### 2. CPU Port Connectors

The KVM cables that connect to the computer's monitor, keyboard and mouse ports plug in here. Each port is color coded and identified by an appropriate icon.

**Note:** Since the KVM cables come with PS/2 style connectors, certain hardware configurations (such as notebooks), that don't have two PS/2 ports may require the use of an adapter, as shown below:

Adapter	Purpose
UC-100KMA	Two PS/2 ports to USB adapter for PCs, Macs and Sun systems

## INSTALLATION



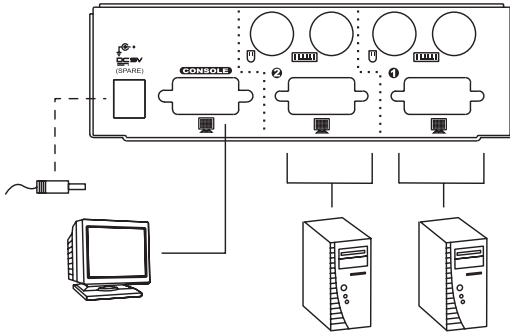
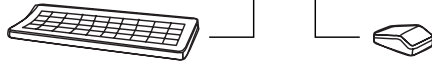
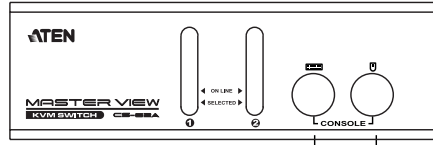
1. Before you begin, make sure that power to all the devices you will be connecting up have been turned off. You must unplug the power cords of any computers that have the *Keyboard Power On* function. Otherwise, the switch will receive power from the computer.
2. To prevent damage to your installation due to ground potential difference, make sure that all devices on the installation are properly grounded. Consult your dealer for technical details, if necessary.

Refer to the diagram on the next page as you perform the following steps:

1. Plug the monitor, keyboard, and mouse into the Console port connectors of the Master View CS-82A unit.
2. Use KVM cables (see the *Hardware Requirements* section), to connect the keyboard, monitor, and mouse ports from any available CPU Port, to the keyboard, monitor, and mouse ports of the computers you are connecting up).
3. If you choose to use external power (optional) plug the power adapter into an external AC source; plug the power adapter cable into the unit's power jack.
4. Turn on the power to the connected computers.

**Note:** The CS-82A's Power On default is to link to the first computer you turn on.





## **OPERATION**

Controlling all the computers in your CS-82A installation from a single console could not be easier. Two port selection methods that provide instant access to the computers are available:

- Manual Port Selection
- Hotkey Port Selection

### **MANUAL PORT SELECTION**

With Manual Port Selection you simply press the Port Selection switch that corresponds to the port that the computer you want to access is attached to. The *Selected LED* lights to indicate which port is active.

### **HOTKEY PORT SELECTION**

Hotkey Port Selection allows you to select the active computer directly from the keyboard. The Master View CS-82A provides the following Hotkey Port Selection features:

- Selecting the Active Port
- Auto Scan Mode

◆ **Selecting the Active Port - Default Method:**

The default method to toggle the KVM focus between the two ports from the keyboard is to tap the left or right Ctrl key twice:

[Ctrl] [Ctrl]

**Note:** The combination must be on the same side (both Left, or both Right).

◆ **Selecting the Active Port - Alternate Method:**

If the Ctrl key combination conflicts with programs running on your computer, you can switch the hotkey to the Scroll Lock key by pressing and holding both Port Selection buttons for three (3) seconds. After this, tap the Scroll Lock key twice to toggle the KVM focus.

[Scroll Lock] [Scroll Lock]

**Note:** To switch back to the default hotkey, press and hold the Port Selection button for three (3) seconds again.

◆ **Auto Scan Mode:**

The CS-82A's Auto Scan feature automatically switches between the two computers at regular intervals so that you can monitor their activity without having to take the trouble of switching yourself.

**Invoking Auto Scan**

To invoke Auto Scan Mode, press and simultaneously release the left Shift key, then press and release the right Shift key:

[Left Shift] [Right Shift].

**Setting the Scan Interval**

The default amount of time that Auto Scan dwells on each port is five seconds. You can change the scan interval at any time while Auto Scan Mode is in effect by keying in a number from 1 to 4. The scan interval that corresponds to the number is shown in the table below:

Number	Scan Interval
1	3 secs
2	5 secs
3	10 secs
4	20 secs

Once scanning begins, it continues until you press the **[Spacebar]** to exit Auto Scan Mode. The port that has the KVM focus at the time scanning stopped remains active.

**Note:** While Auto Scan Mode is in effect, the console will not function normally. You must exit Auto Scan Mode (by pressing the **[Spacebar]**) in order to regain normal control of the console.

♦ **Hotkey Summary Table**

<b>Combination</b>	<b>Action</b>
[LCtrl] [LCtrl] or [RCtrl] [RCtrl]	Toggles access between the computers. (Default)
[Scroll Lock] [Scroll Lock]	Toggles access between the computers. (Alternate)
[LShift] [RShift]	Starts Auto Scan Mode. Keying in a number from 1 to 4 while Auto Scan Mode is in effect changes the scan interval.
[Spacebar]	Exits Auto Scan Mode.

## APPENDIX

### SELECTED LED DISPLAY

Activity	Meaning
Off	Port is not selected.
On (Steady)	The computer attached to the LED's corresponding port has the KVM focus.
Flashing (On and Off equal)	The computer attached to the LED's corresponding port has the KVM focus and is being accessed in Auto Scan mode.

### SPECIFICATIONS

Function	Specification	
Power Consumption	180 mW	
Computer Connections	2	
Port Selection	Push Button Switches; Hotkeys	
LEDs	On Line	2 (Orange)
	Selected	2 (Green)
Connectors	Keyboard	1 x 6 pin mini-DIN female (PS/2 style) - Console 2 x 6 pin mini-DIN female (PS/2 style) - CPU Ports
	Mouse	1 x 6 pin mini-DIN female (PS/2 style) - Console 2 x 6 pin mini-DIN female (PS/2 style) - CPU Ports
	Video	1 x HDB-15 female (std. VGA/SVGA) - Console 2 x HDB-15 male (std. VGA/SVGA) - CPU Ports
Resolution	Up to 1920 x 1440; DDC, DDC2, DDC2B	
Scan Interval	3, 5, 10, 20 Seconds	
Conversion	Keyboard	PS/2
	Mouse	PS/2
Operating Temperature	5 - 40° C	
Storage Temperature	-20 - 60° C	
Humidity	0 - 80% RH Non condensing	
Housing	Metal	
Weight	420 g	
Dimensions (L x W x H)	128 x 75 x 45 mm	

## TROUBLESHOOTING

Symptom	Cause	Action
Keyboard <sup>1</sup> and/or Mouse <sup>2</sup> Not Responding	Loose cables.	Check all cable connections to make sure they are completely seated in their sockets.
	Switch is in Auto Scan Mode.	Press the Spacebar to exit Auto Scan Mode.
	Keyboard / Mouse needs to be reset.	Unplug the keyboard / mouse from the Console Keyboard Port, then plug it back in.
	Mouse set to Serial Mode.	Some mice can be set to act as either a PS/2 or serial mouse. Make sure the mouse is set to PS/2 mode.
	Incorrect Mouse Driver.	Check your Device Manager to be sure that the correct driver for your mouse (obtained from the manufacturer, or supplied by the operating system), has been installed. Because of the wide variety of mouse driver standards for the modern series of mice (the ones with the extra buttons and wheels), this unit only supports all of the extra features of the Microsoft Intellimouse. It supports the scroll wheel function of most other mice.
	Switch needs to be reset.	Turn off the computers and unplug their power cords; wait 5 seconds; plug the power cords back in and turn the computers back on.
Video Problems	Loose cables.	Check all cable connections to make sure they are completely seated in their sockets.
	Resolution and/or Bandwidth set too high.	This unit supports VGA, SVGA, Multisync, and XGA (interlaced), with resolutions of up to 1920 x 1440.

**Troubleshooting Notes:**

1. The unit is designed to work with PS/2 keyboards and mice. XT (84 key) and AT keyboards will not work. Serial mice will not work.
2. Some Notebooks, notably the IBM Thinkpad and Toshiba Tecra, have trouble when their mouse and keyboard ports are used simultaneously. To avoid this, either use a PS/2 to USB adapter (as described on p. 5), or only connect the mouse port or the keyboard port. If you connect the mouse port, you will need to use the notebook's keyboard when the notebook becomes the active computer.

**LIMITED WARRANTY**

IN NO EVENT SHALL THE DIRECT VENDOR'S LIABILITY EXCEED THE PRICE PAID FOR THE PRODUCT FROM THE DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THE PRODUCT, DISK OR ITS DOCUMENTATION.

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